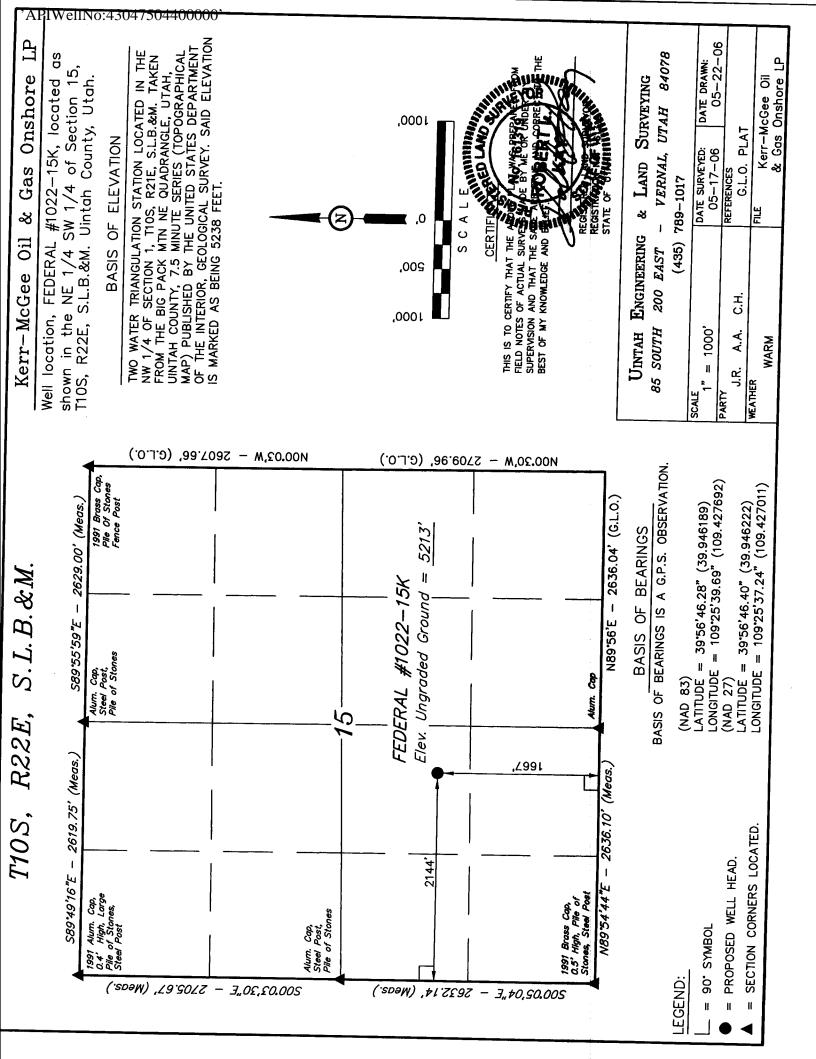
STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS AND MINING							FOR		
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Federal 1022-15K			
2. TYPE OF WORK  DRILL NEW WELL REENTER P&A WELL DEEPEN WELL						3. FIELD OR WILDO	CAT NATURAL BUTTES		
4. TYPE OF WELL  Gas Well Coalbed Methane Well: NO						5. UNIT or COMMU	NITIZATION AGRE	EMENT NAME	
6. NAME OF OPERATOR KERF	R-MCGEE OIL &	GAS ONSHORE, L.P.				7. OPERATOR PHO	NE 307-752-1169		
8. ADDRESS OF OPERATOR		Denver, CO, 80217				9. OPERATOR E-MA	<b>IL</b> Gianakos@anadarko.	com	
10. MINERAL LEASE NUMBER		11. MINERAL OWNER	_			12. SURFACE OWN			
(FEDERAL, INDIAN, OR STATE) UTU 01196A		FEDERAL ( INDI	IAN 🗍 STATE (	)	FEE (		DIAN 🗍 STATE (	~ ~	
13. NAME OF SURFACE OWNER (if box 12	= 'fee')					14. SURFACE OWN	ER PHONE (if box 1	.2 = 'fee')	
15. ADDRESS OF SURFACE OWNER (if box	12 = 'fee')					16. SURFACE OWN	ER E-MAIL (if box 1	l2 = 'fee')	
17. INDIAN ALLOTTEE OR TRIBE NAME		18. INTEND TO COM		ION I	FROM	19. SLANT			
(if box 12 = 'INDIAN')			ommingling Applicat	ion)	NO 🗍	VERTICAL ( DIF	RECTIONAL ( HO	ORIZONTAL 🗐	
20. LOCATION OF WELL	F	OOTAGES	QTR-QTR	9	SECTION	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	1667 F	FSL 2144 FWL	NESW		15	10.0 S	22.0 E	S	
Top of Uppermost Producing Zone	ducing Zone 1667 FS		NESW		15	10.0 S	22.0 E	S	
At Total Depth	1667 F	SL 2144 FWL NESW			15	10.0 S	22.0 E	S	
21. COUNTY  UINTAH		22. DISTANCE TO NE	EAREST LEASE LIN	E (Fe	et)	23. NUMBER OF ACRES IN DRILLING UNIT 320			
		25. DISTANCE TO NE (Applied For Drilling		AME	POOL	<b>26. PROPOSED DEPTH</b> MD: 8440 TVD: 8440			
<b>27. ELEVATION - GROUND LEVEL</b> 5213		28. BOND NUMBER	WYB000291			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496			
		AT	TACHMENTS		,				
VERIFY THE FOLLOWING	ARE ATTACI	HED IN ACCORDANC	CE WITH THE U	ГАН (	OIL AND G	GAS CONSERVATI	ON GENERAL RU	JLES	
WELL PLAT OR MAP PREPARED BY	LICENSED SU	RVEYOR OR ENGINEER	сом	COMPLETE DRILLING PLAN					
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGR	EEMENT (IF FEE SURFA	ACE) FORM	) FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)				OGRA	PHICAL MAF	•			
NAME Danielle Piernot	NAME Danielle Piernot TITLE Regulatory Analyst			PHONE 720 929-6156					
SIGNATURE	1	<b>DATE</b> 05/21/2009			<b>EMAIL</b> gnl	oregulatory@anadarko	o.com		
<b>API NUMBER ASSIGNED</b> 43047504400000	,	APPROVAL			bol	20 gill			
					Pern	nit Manager			

API Well No: 43047504400000 Received: 5/21/2009

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	8440		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	8440	11.6			

API Well No: 43047504400000 Received: 5/21/2009

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2075		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2075	36.0			



#### **Federal 1022-15K**

Surface: 1,667' FSL, 2,144' FWL (NE/4SW/4) Sec. 15 T10S R22E

> Uintah, Utah Mineral Lease: UTU 01196A

#### ONSHORE ORDER NO. 1

#### DRILLING PROGRAM

An APD for this location was originally approved on June 18, 2007 and was given API 43-047-39388. Kerr-McGee Oil & Gas Onshore, LP rescinded the APD for this location, however Kerr-McGee respectfully requests a new APD for this location due to a revised drilling schedule in this area. A Cultural Resource report (report number MOAC 06-245) and a Paleo Report (report number IPC 06-192) were submitted and reviewed with the original APD.

## 1. – 2. Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	Resource
Uinta Green River Birds Nest Mahogany Wasatch Mesaverde	0 – Surface 1,106' 1,308' 1,876' 4,115' 6,429'	Water Water Gas Gas
MVU2 MVL1	7,462' 7,965'	Gas Gas
TD	8,440'	

#### 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program.

#### 4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

#### 5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program.

#### **Evaluation Program:**

Please refer to the attached Drilling Program.

#### 7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 8,440' TD, approximately equals 5,039 psi (calculated at 0.6 psi/foot).

Maximum anticipated surface pressure equals approximately 3,182 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

#### 8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

#### 9. <u>Variances:</u>

Please refer to the attached Drilling Program.

*Onshore Order #2 – Air Drilling Variance* 

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

#### **Background**

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone. KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

#### Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

#### Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

#### Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

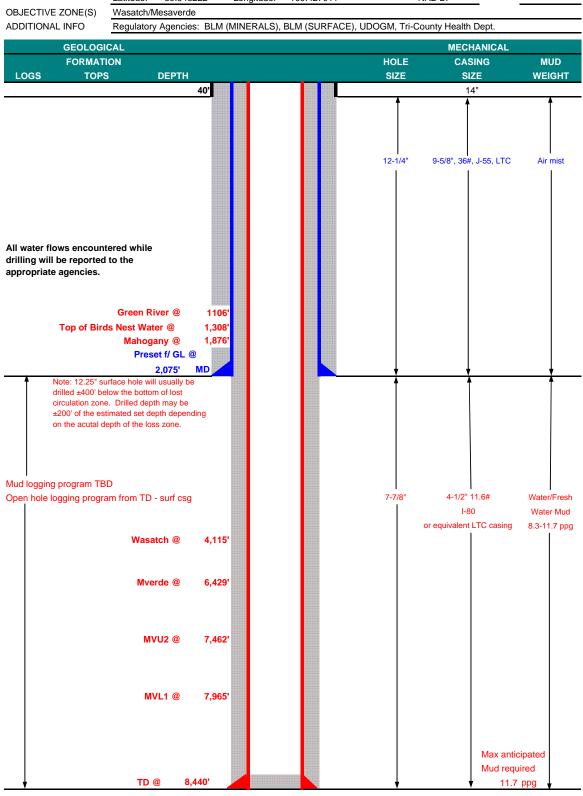
#### 10. Other Information:

Please refer to the attached Drilling Program.



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM







#### **KERR-McGEE OIL & GAS ONSHORE LP**

#### DRILLING PROGRAM

#### **CASING PROGRAM**

									ESIGN FACT	ORS
	SIZE	IN <sup>-</sup>	ΓERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"		0-40'							
								3,520	2,020	453,000
SURFACE	9-5/8"	0	to	2075	36.00	J-55	LTC	1.07*	2.08	6.06
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	8440	11.60	I-80	LTC	2.37	1.24	2.50

\*Burst on suface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.69

- 1) Max Anticipated Surf. Press.(MASP) (Surf Csg) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac grad x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

11.7 ppq) 0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**MASP** 3,182 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD =

11.7 ppg)

0.6 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

5,039 psi **MABHP** 

#### **CEMENT PROGRAM**

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1		+ .25 pps flocele				
TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
		+ 2% CaCl + .25 pps flocele				
TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to sur	face, optic	on 2 will be	utilized	
Option 2 LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite	170	35%	11.00	3.82
		+.25 pps Flocele + 3% salt BWOC				
TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
		+ .25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION LEAD	3,610'	Premium Lite II + 0.25 pps celloflake +	350	40%	11.00	3.38
		5 pps gilsonite + 10% gel '+ 1% Retarder				
TAIL	4,830'	50/50 Poz/G + 10% salt + 2% gel	1180	40%	14.30	1.31
		+.1% R-3				

<sup>\*</sup>Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

#### **FLOAT EQUIPMENT & CENTRALIZERS**

**SURFACE** 

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.

**PRODUCTION** 

Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

#### **ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

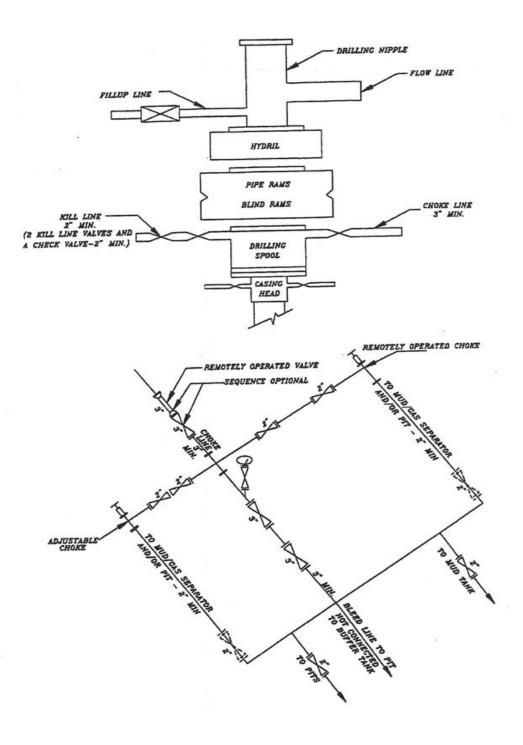
Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utililzed.

DRILLING ENGINEER:		DATE:		
	John Huycke / Grant Schluender	-		
DRILLING SUPERINTENDENT:		DATE:		
	Federal 1022-15K Drilling Diagram vis			

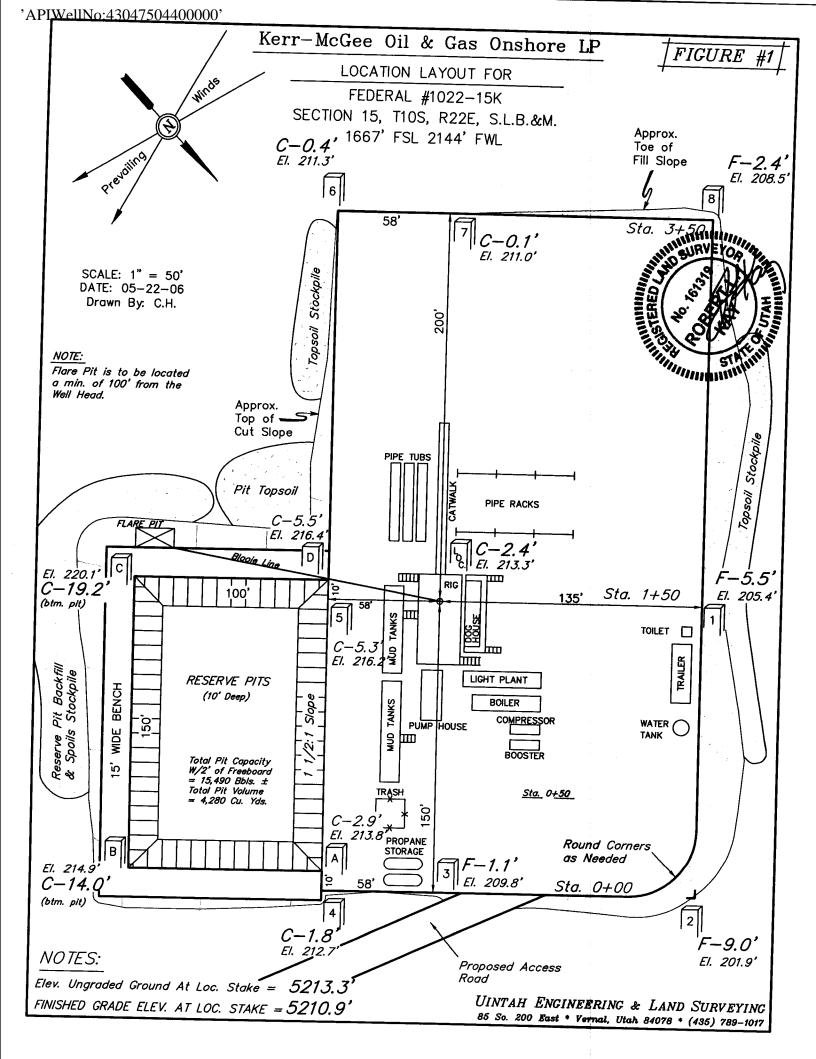
John Merkel / Love Pround 1022-15K Drilling Diagram

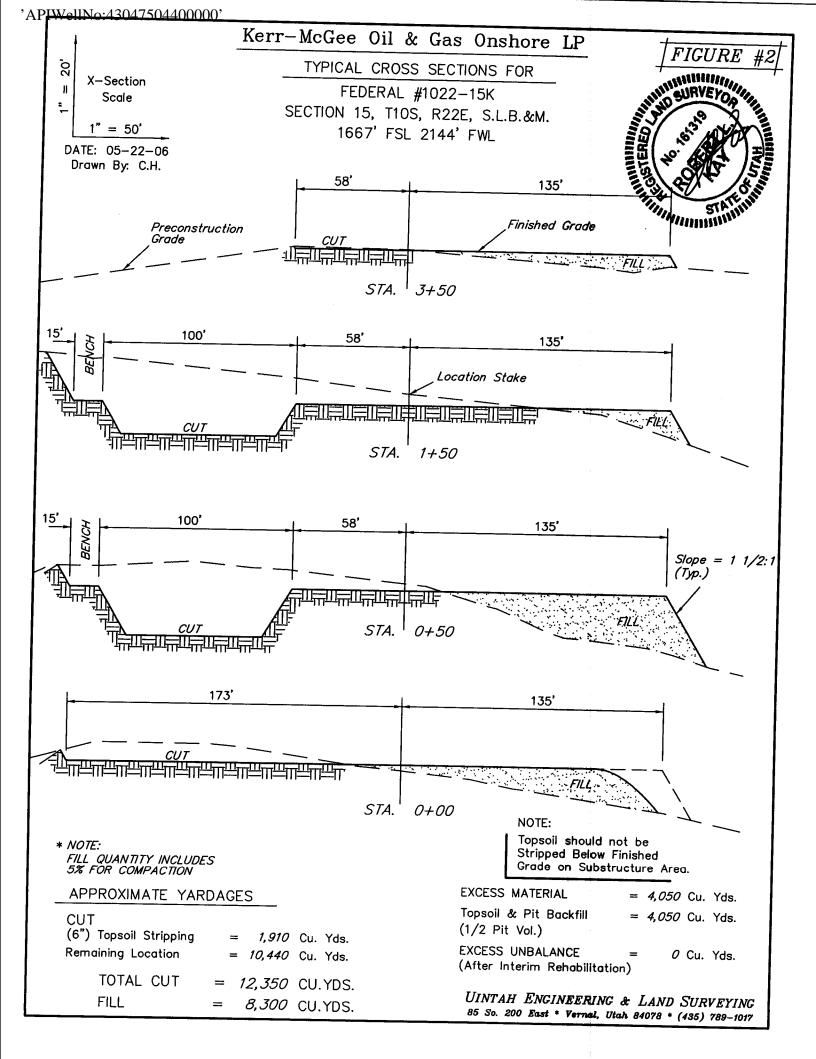
<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

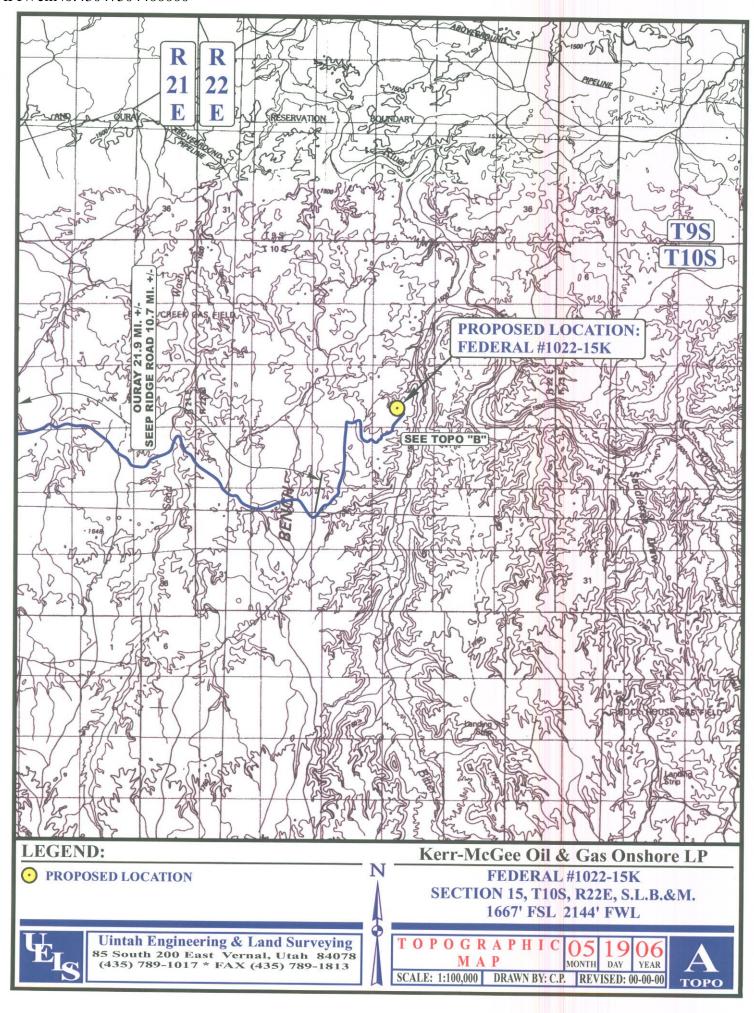
EXHIBIT A Federal 1022-15K

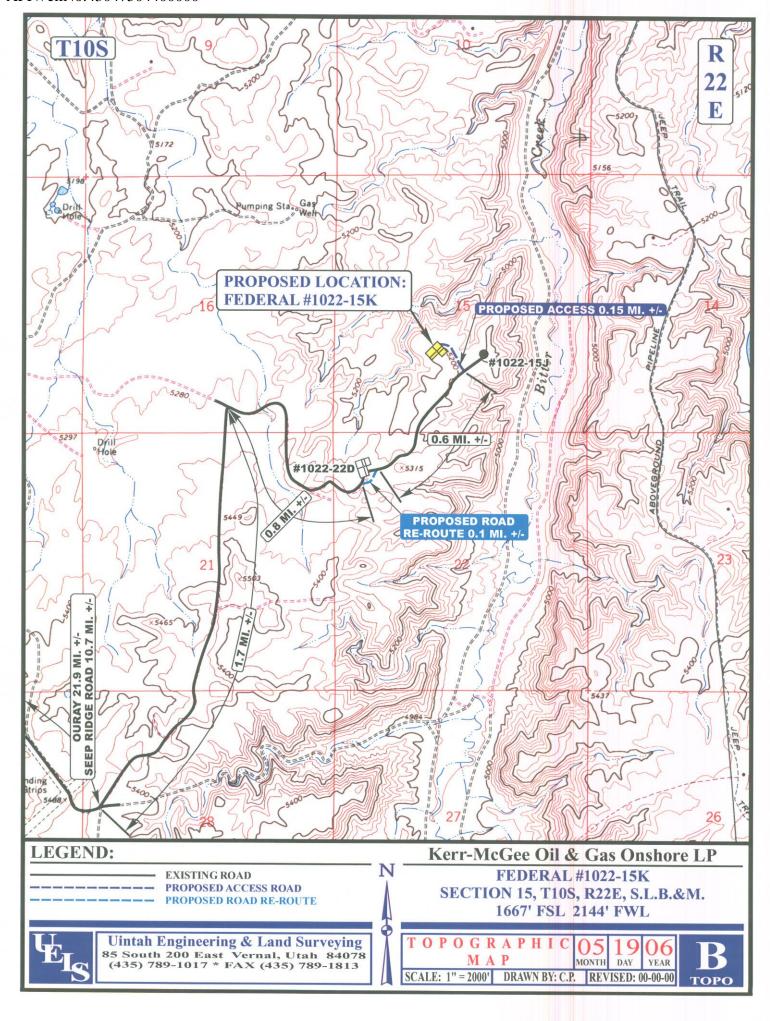


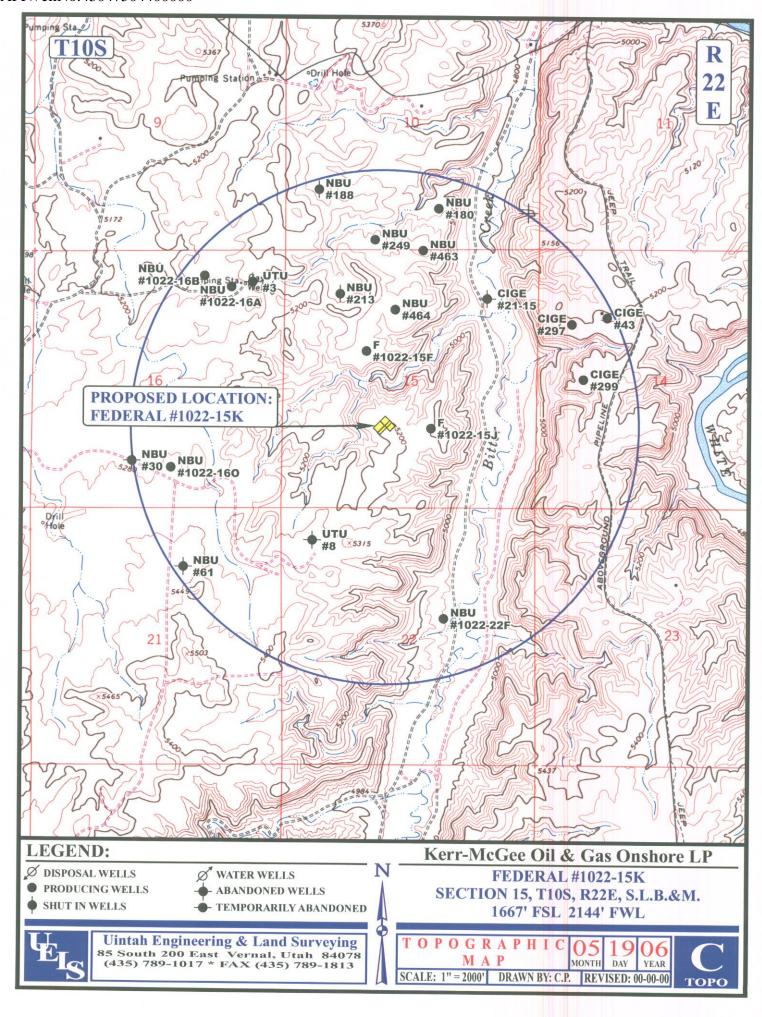
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

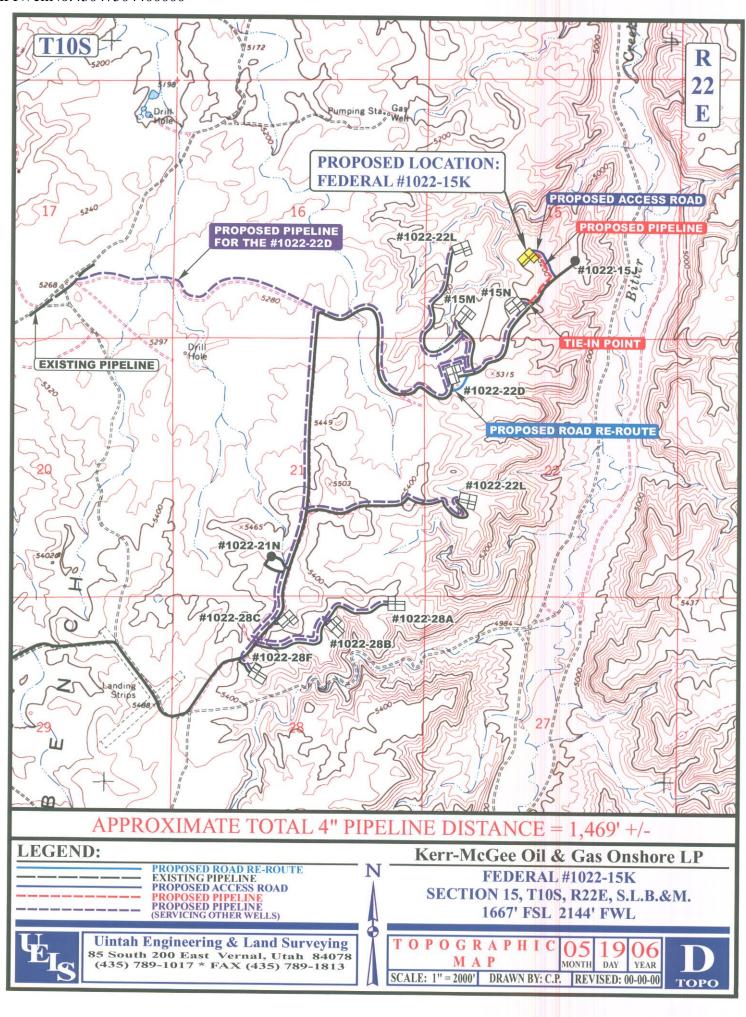












# Kerr-McGee Oil & Gas Onshore LP

FEDERAL #1022-15K

PIPELINE ALIGNMENT LOCATED IN UINTAH COUNTY, UTAH SECTION 15, T10S, R22E, S.L.B.&M.

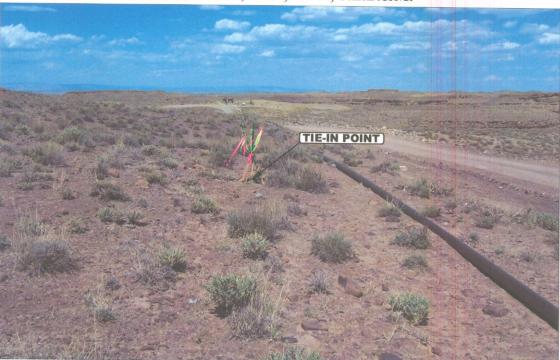


PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: NORTHEASTERLY

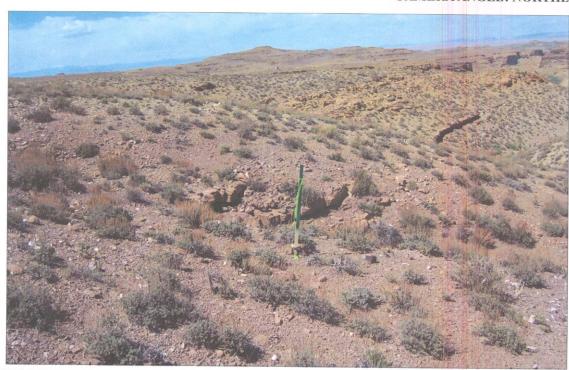


PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: NORTHEASTERLY



PIPELINE PHOTOS MONTH DAY YEAR TAKEN BY: J.R. DRAWN BY: C.P. REVISED: 00-00-00

## Kerr-McGee Oil & Gas Onshore LP

FEDERAL #1022-15K

LOCATED IN UINTAH COUNTY, UTAH SECTION 15, T10S, R22E, S.L.B.&M.

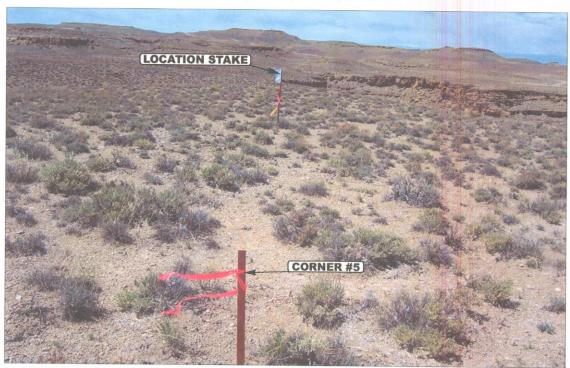


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

**CAMERA ANGLE: NORTHWESTERLY** 



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



**LOCATION PHOTOS** 

TAKEN BY: J.R. | DRAWN BY: C.P. | REVISED: 00-00-00

## Kerr-McGee Oil & Gas Onshore LP FEDERAL #1022-15K SECTION 15, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, SOUTHEASTERLY DIRECTION APPROXIMATELY 10.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 0.8 MILES TO THE BEGINNING OF THE ROAD RE-ROUTE TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO AN EXISTING ROAD TO THE EAST; PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR TO THE NORTHWEST; FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 56.25 MILES.

#### **Federal 1022-15K**

Surface: 1,667' FSL, 2,144' FWL (NE/4SW/4) Sec. 15 T10S R22E

> Uintah, Utah Mineral Lease: UTU 01196A

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

An APD for this location was originally approved on June 18, 2007 and was given API 43-047-39388. Kerr-McGee Oil & Gas Onshore, LP rescinded the APD for this location, however Kerr-McGee respectfully requests a new APD for this location due to a revised drilling schedule in this area. A Cultural Resource report (report number MOAC 06-245) and a Paleo Report (report number IPC 06-192) were submitted and reviewed with the original APD.

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents. An NOS was submitted on May 30, 2006 showing the surface locations in NE/4 SW/4 of Section 15 T10S R22E.

An on-site meeting for this surface location was held on August 20, 2008.

#### 1. <u>Existing Roads</u>:

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

#### 2. Planned Access Roads:

Approximately  $\pm 0.15$  mi. ( $\pm 792$ ') of new access road is proposed. Please refer to the attached Topo Map B.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

#### 3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

#### 4. <u>Location of Existing & Proposed Facilities:</u>

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Shadow Gray, a non-reflective earthtone.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately  $\pm 1,469$ ° of proposed pipeline will be installed. Refer to Topo D for the proposed pipeline.

#### 5. Location and Type of Water Supply:

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

#### **6.** Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

#### 7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used; it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit. Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI in Sec. 5 T9S R22E, NBU #159 in Sec. 35 T9S R21E, Ace Oilfield in Sec. 2 T6S R20E, MC&MC in Sec. 12 T6S R19E, Pipeline Facility in Sec. 36 T9S R20E, Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E, Bonanza Evaporation Pond in Sec. 2 T10S R23E.

#### 8. Ancillary Facilities:

None are anticipated.

#### **9.** Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be resurveyed and a Form 9 shall be submitted.

#### 10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

#### Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

#### 11. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

#### 12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Paleontological survey report and a Cultural Resource report was submitted with the original APD for this location.

# 'APIWeIINo:43047504400000'

#### 13. Lessee's or Operators' Representative & Certification:

Kathy Schneebeck Dulnoan Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6007 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720-929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

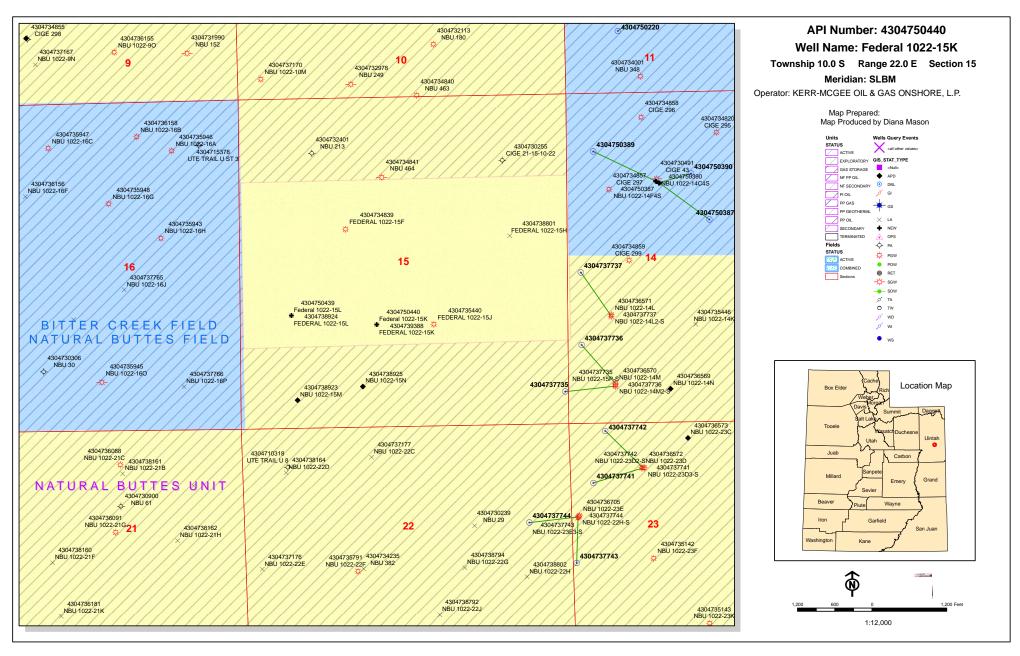
Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Danielle Piernot

May 21, 2009

Date





Kerr-McGee Oil & Gas Onshore LP 1049 18 Shazari Suitz 1200 Description CO 88262

July 6, 2009

Mrs. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

RE:

Federal 1022-15K

T10S-22E

Section 15: NESW 1667' FSL, 2144' FWL Uintah County, Utah

Dear Mrs. Mason:

Kerr-McGee Oil & Gas Onshore LP has submitted a permit to drill the captioned well to test the Wasatch and Mesaverde formations. The well is located at an exception location to State Rule 649-3-2 (Statewide). The well location was moved for topographic reasons. Kerr-McGee owns 100% of the leasehold within 460 feet of the exception location of the offset lands and has no objection to the exception location.

Kerr-McGee requests your approval of this exception location. If you have any questions, call me at 720-929-6262. Thank you for your assistance.

Sincerely,

Jason Rayburn

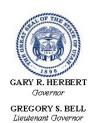
Landman

### WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	5/21/2009	API NO. ASSIGNED: 430475044	100000
WELL NAME:	Federal 1022-15K		
OPERATOR:	KERR-MCGEE OIL & 0	GAS ONSHORE, L.P. (N2995) <b>PHONE NUMBER:</b> 720 929-61	156
CONTACT:	Danielle Piernot		
PROPOSED LOCATION:	NESW 15 100S 220E	Permit Tech Review:	
SURFACE:	1667 FSL 2144 FWL	Engineering Review:	
воттом:	1667 FSL 2144 FWL	Geology Review: 📝	
COUNTY:	UINTAH		
LATITUDE:	39.94621	<b>LONGITUDE:</b> -109.42698	3
UTM SURF EASTINGS:	634384.00	<b>NORTHINGS:</b> 4422761.00	0
FIELD NAME:	NATURAL BUTTES		
LEASE TYPE:	1 - Federal		
LEASE NUMBER:	UTU 01196A	PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE	
SURFACE OWNER:	1 - Federal	COALBED METHANE: NO	
RECEIVED AND/OR REVIE	:WED:	LOCATION AND SITING:	
<b>₽</b> PLAT		R649-2-3.	
<b>Bond:</b> FEDERAL - WYB	000291	Unit:	
Potash		R649-3-2. General	
☑️ Oil Shale 190-5			
Oil Shale 190-3		R649-3-3. Exception	
Oil Shale 190-13		✓ Drilling Unit	
Water Permit: Permit	#43-8496	Board Cause No: Cause 173-24	
RDCC Review:		Effective Date: 10/5/2009	
Fee Surface Agreeme	ent	Siting: 460' Fr Ext. U Boundary & uncommitted Tract	
✓ Intent to Commingle		R649-3-11. Directional Drill	
Commingling Approved	d		
Comments: Presite Comments:	ompleted		
Stinulations: 3 - Com	minalina - ddoucet		

3 - Commingling - ddoucet 4 - Federal Approval - dmason 17 - Oil Shale 190-5(b) - dmason 23 - Spacing - dmason

API Well No: 43047504400000



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

#### **Permit To Drill**

\*\*\*\*\*\*

Well Name: Federal 1022-15K
API Well Number: 43047504400000
Lease Number: UTU 01196A
Surface Owner: FEDERAL

**Approval Date:** 2/17/2010

#### **Issued to:**

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-24. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### **Commingle:**

In accordance with Board Cause No. 173-24, commingling the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable

API Well No: 43047504400000

after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

#### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

Gil Hunt

Associate Director, Oil & Gas

Die Hunt

	FORM 9		
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 01196A
SUNDF	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposition bottom-hole depth, reenter plu DRILL form for such proposals.	xisting wells below current e APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME:	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: FEDERAL 1022-15K
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047504400000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	PHON treet, Suite 600, Denver, CO, 80217 3779	<b>E NUMBER:</b> 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1667 FSL 2144 FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESW Section: 15	P, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	_ ACIDIZE	ALTER CASING	☐ CASING REPAIR
✓ NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME
2/17/2011	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date.	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:
Kerr-McGee Oil & G extension to this A	MPLETED OPERATIONS. Clearly show all pertias Onshore, L.P. (Kerr-McGee)  NPD for the maximum time allow  With any questions and/or com	respectfully requests an wed. Please contact the ments. Thank you.	Approved by the Utah Division of Oil, Gas and Mining ate: 02/17/2011
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Danielle Piernot	720 929-6156	Regulatory Analyst	
<b>SIGNATURE</b> N/A		<b>DATE</b> 2/16/2011	



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43047504400000

**API:** 43047504400000 **Well Name:** FEDERAL 1022-15K

Location: 1667 FSL 2144 FWL QTR NESW SEC 15 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date Original Permit Issued: 2/17/2010** 

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

uire revision. Following is a checklist of some items related to the application, which should be verified.
<ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No</li> </ul>
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes </li> <li>No</li> </ul>
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
matures. Denielle Diermet. Date: 2/16/2011

**Signature:** Danielle Piernot **Date:** 2/16/2011

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.



## State of Utah

#### **DEPARTMENT OF NATURAL RESOURCES**

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 13, 2012

Jenn Hawkins Kerr McGee Oil & Gas Onshore, L.P. 1099 18th Street, Suite 1800 Denver, CO 80202

Re:

APDs Rescinded for Kerr McGee Oil & Gas Onshore, L.P.

**Uintah County** 

Dear Ms. Hawkins:

Enclosed find the list of APDs that you requested to be rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective March 7, 2012.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

cc:

Well File

Bureau of Land Management, Vernal

SITLA, Ed Bonner



```
APINumber
                Well Name
4304750274
                NBU 727-35E
4304737762
                FEDERAL 920-24G
4304750439
                FEDERAL 1022-15L
4304750440
                FEDERAL 1022-15K
4304750441
                FEDERAL 1021-25I
4304750442
                FEDERAL 1021-25M
4304750443
                FEDERAL 1021-25N
4304738796
                FEDERAL 1022-27K
4304738980
                BITTER CREEK 1122-3N
4304737763
                FEDERAL 920-24H
4304739156
               NBU 1022-240
4304736573
               NBU 1022-23C
4304751040
               NBU 920-22L4CS
4304751041
               NBU 920-22M1BS
               NBU 920-22M4BS
4304751042
4304751051
               NBU 920-23L2DS
4304751052
               NBU 920-23L4BS
4304738921
               NBU 1022-8B-4T
4304739253
               NBU 921-15L
4304738159
               NBU 1022-20B
               NBU 1022-28I
4304738169
4304750464
               NBU 922-33N4S
4304750465
               NBU 922-3304S
4304750466
               NBU 922-33P2S
4304750467
               NBU 922-33P3S
4304738820
               LOVE 1121-18B
4304740189
               NBU 922-35IT
4304738491
               NBU 1022-5H-4
4304750093
               NBU 1022-34F
4304750094
               NBU 1022-35M
4304750095
               NBU 1022-34E
4304750097
               FEDERAL 1022-27M
4304750067
               NBU 921-16F3S
4304750068
               NBU 921-16E4S
4304737103
               FEDERAL 1022-29C
4304750127
               NBU 420-29E
4304739527
               NBU 1021-20F
4304739528
               NBU 1021-20E
4304739530
               NBU 1021-20B
4304738741
               LOVE 1121-7P
4304738742
               LOVE 1121-7L
4304738744
               LOVE 1121-7F
4304738745
               LOVE 1121-7D
4304738747
               LOVE 1121-8P
4304738750
               LOVE 1121-8F
4304738754
               LOVE 1121-15L
4304738755
               LOVE 1121-15N
4304739525
               NBU 1021-20H
4304738795
               NBU 1022-270
4304738807
               NBU 1022-34D
4304738920
               NBU 1022-4E-3
4304737547
               NBU 1022-17P
4304751050
               NBU 920-23L1BS
4304737907
               NBU 1021-3L
```

NBU 1021-3D

4304737908

4304737909	NBU 1021-3H
4304737917	NBU 1021-25E
4304737911	NBU 1021-24C
4304750029	NBU 375-13E
4304750033	NBU 515-25E
4304750034	NBU 673-25E
4304750035	NBU 674-25E
4304737963	NBU 1021-3G
4304737965	NBU 1021-5D
4304737684	NBU 498-13E